

AMENDMENTS TO THE CLAIMS:

1. (Original) A communications receiver, comprising a pulse detection unit, for detecting pulses in a received signal, the pulse detection unit comprising:

a plurality of comparators;

a sampling time generator, for generating signals indicative of a plurality of sampling time points; and

a reference level generator, for generating a plurality of reference levels,

wherein each of the comparators is programmable with a sampling time point selected from said plurality of sampling time points and with a reference level selected from said plurality of reference levels, and

wherein the received signal is applied to each of the comparators such that each of the comparators produces a respective output signal based on a comparison between the received signal level and the selected reference level at the selected sampling time point.

2. (Original) A communications receiver as claimed in claim 1, comprising a signal processor, for detecting pulses in the received signal based on the output signals from the comparators.

3. (Original) A communications receiver as claimed in claim 2, wherein the signal processor is adapted to program the comparators with respective selected sampling time points and reference levels, in order to detect said pulses.

4. (Previously Presented) A communications receiver as claimed in claim 1, comprising a pre-amplifier, for pre-amplifying the received signal to an appropriate level for comparison with the plurality of reference levels.

5. (Previously Presented) A communications receiver as claimed in claim 1, wherein the reference level generator is adapted to scale the generated plurality of reference levels for comparison with the received signal.

6. (Previously Presented) A communications receiver as claimed in claim 1, further comprising a current reference, for driving bias currents to said plurality of comparators.

7. (Original) A method of detecting pulses received in a communications receiver, the method comprising:

generating signals indicative of a plurality of sampling time points;

programming each of a plurality of comparators with a sampling time point selected from said plurality of sampling time points and with a reference level selected from said plurality of reference levels, and

applying the received signal to each of the comparators such that each of the comparators produces a respective output signal based on a comparison between the received signal level and the selected reference level at the selected sampling time point.

8. (Original) A method as claimed in claim 7, comprising detecting pulses in the received signal based on the output signals from the comparators.

9. (Previously Presented) A method as claimed in claim 7, comprising pre-amplifying the received signal to an appropriate level for comparison with the plurality of reference levels.

10. (Previously Presented) A method as claimed in claim 7, wherein comprising scaling the generated plurality of reference levels for comparison with the received signal.

11. (Previously Presented) A method as claimed in claim 7, comprising programming the comparators with respective selected sampling time points and reference levels, based on knowledge about the possible shapes of said pulses.

12. (Previously Presented) A method as claimed in claim 7, comprising programming the comparators with respective selected sampling time points and reference levels, based on knowledge about the expected arrival times of said pulses.